Request to Archive
With The National Centers for Environmental Information
For National Oceanic and Atmospheric Administration (NOAA) Geostationary Operational Environmental Satellite (GOES) Imager Full Disk (FD) Land Surface Albedo (LSA) product Provided by NESDIS>OSDPD>OSPO

2015-12-21

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

NESDIS/OSPO

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

This collection includes NOAA GOES East (west) FD Land Surface Albedo (LSA) product with hourly temporal resolution during the daytime. The Product is in full horizontal spatial resolution of 2 km. Each product contains LSA retrievals, quality control (QC) flags, longitude and latitude.
An Archive Product generated through the same process as operational runs is also need to be archived.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2017-09-29
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:

2017-09-29

7. Who are the expected users of the archived data? How will the archived data be used?

- GOES-R Land Surface Albedo is needed for GOES-R Fractional Snow Cover baseline product;
- The GOES-R Fractional Snow Cover baseline product currently can not be produced as implemented by Harris;
- The Fraction Snow Cover product requires Surface Reflectance (which is part of the Surface Albedo product) as an input, without it the algorithm can not be run.
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8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

The development and implementation of the GOES-R Surface Albedo algorithm will provide the GOES-R Fraction Snow Cover product the input it requires. The Surface Albedo product will be run on Mesoscale, CONUS, and Full Disk images as required by the Fractional Snow Cover Algorithm.
Use AmeriFlux, SURFRAD, and GC-Net as validation data sets.

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
N/A

10. List the input datasets and ancillary information used to produce the data.
- GOES radiance observations at 0.47 micron, 0.64 micron, 0.86 micron, 1.61 micron, and 2.26 micron, geolocation, land type, satellite and solar geometry data from GSIP L1 dataset
- Cloud cover data from GSIP L2 dataset
- Ocean/land mask data from GSIP L2 dataset
- Preprocessed and retrieved surface bidirectional reflectance distribution function parameters

11. List web pages and other links that provide information on the data.
http://www.ospo.noaa.gov/Operations/GOES/status.html
http://www.ospo.noaa.gov/Products/land/gsip/index_v3.html

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. ATBD, User Manual

13. Indicate the data file format(s).
1. netCDF-4

14. Are the data files compressed?
netCDF-4/HDF5 compression

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).
GOES East Full Disk: GOES_E_LSA_FD_YYYYMMDD_0000UTC.nc4. (Max 14 hourly files per day (daytime only))
GOES West Full Disk: GOES_W_LSA_FD_YYYYMMDD_0000UTC.nc4. (Max 14 hourly files per day (daytime only))

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
It should be available in the summer of 2017 when the albedo system is in pre-operational status.

17. What is the total data volume to be submitted?
Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate:	8GB per Day
Data File Frequency:	28 per Day
Data Production Start:	2017-09-29

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	Suitland, Maryland 20746
System Name:	GOES-R PDA
System Owner:	DOC/NOAA/NESDIS/OSDPD/SSD > Satellite Services Division, Office of Satellite Data Processing and Distribution, NESDIS, NOAA, U.S. Department of Commerce

Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download
2. Direct download links

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

NCEP has a strong requirement for NESDIS to continually and operationally produce satellite-derived global fields of LSA, both from multiple polar orbiters for global coverage and multiple geostationary satellites in order to assess and substantially improve the physical simulations of LSA in the Noah Land Surface Model (LSM) component of the NCEP Global Forecast System (GFS).

The Noah LSM must provide the atmospheric component of the GFS with accurate simulations of 1) surface sensible heat flux, 2) surface latent heat flux (evaporation), 3) surface upward longwave radiation and 4) surface upward shortwave radiation (albedo). The accuracy of the first three of these four land surface fluxes is critically dependent on the accuracy of Noah LSM simulations of LSA.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

PSDI archive funding possible; assistance needed to get archive cost estimates.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by:	2017-09-29
Accessible by:	2017-09-29

30. Add any other pertinent information for this request.

None